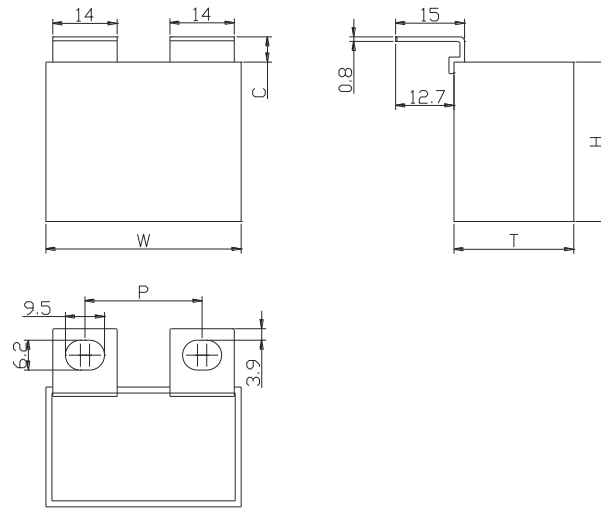
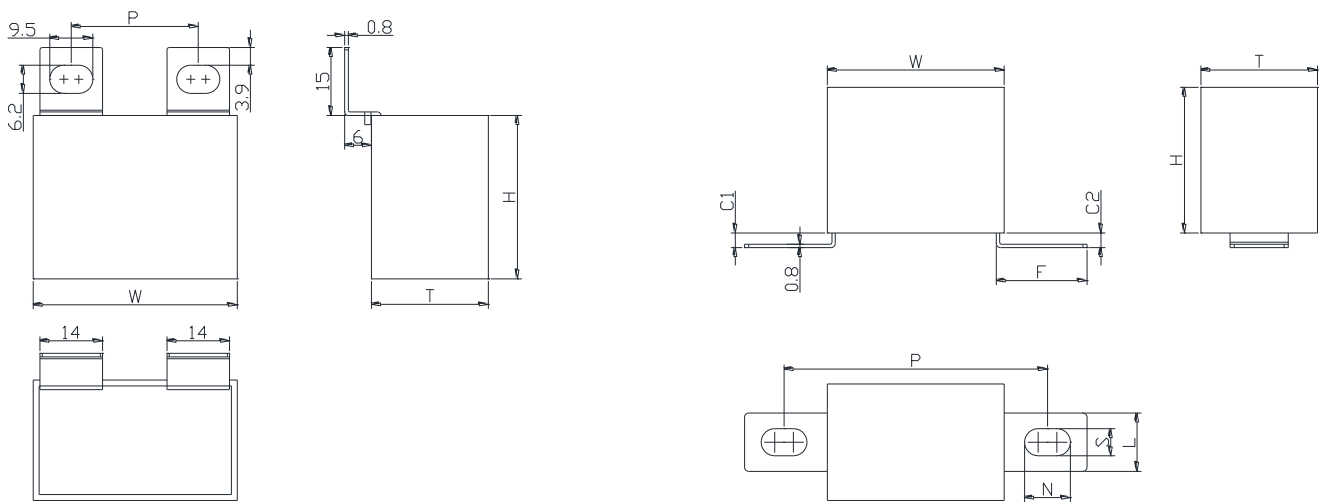


IGBT 吸收电容 (接线片)  
 Snubber Capacitor For IGBT (Lug Terminals)  
**外形图 Outline Drawing(mm)**

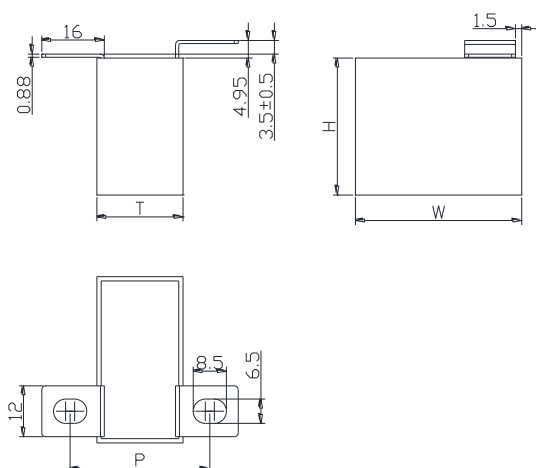


Type A

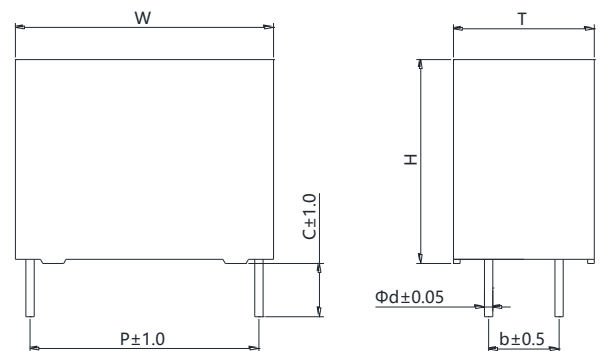


Type B

Type C



Type D



Type E

## ■ 特点

- 内串，双面金属化结构
- 塑料外壳，环氧树脂灌封
- 铜片或铜线引出
- 高脉冲强度和高接触可靠性
- 电感低

## ■ Features

- Internal series connection, double metallization structure
- Plastic case, filled with epoxy resin
- Copper or copper wire leads
- High pulse strength and high contact reliability
- Low inductance

## ■ 主要用途

- IGBT吸收电路

## ■ Typical Application

- IGBT snubber circuit

## ■ 技术要求 Specifications

引用标准 Reference Standard	IEC 61071 (GB/T 17702)	
	IEC 60068 (GB/T 2423)	
气候类别 Climatic Category	40/85/21	
额定电压 Rated Voltage	600VDC ~ 5000VDC	
容量范围 Capacitance range	0.01 $\mu$ F ~ 10 $\mu$ F	
容量偏差 Capacitance Tolerance	J:±5%, K:±10%	
损耗角正切 Dissipation factor tg $\delta$	≤0.0007 (10KHz, 20°C)	
脉冲能力 Withstand strike current ability	dv/dt > 500V/ $\mu$ s	
杂散电感量 Stray inductance	< 50nH	
浪涌电压 Surge Voltage	2VR (t < 100ms)	
绝缘电阻 Insulation Resistance	CR ≤ 0.33 $\mu$ F	CR > 0.33 $\mu$ F
	> 15 000M $\Omega$ (20°C, 100V, 1min)	> 10 000s (20°C, 100V, 1min)
测试电压 Voltage Proof	极间 Between Terminals: 1.5VRdc (10s)	
阻燃等级 Flame Rating	UL94V-0	
最高使用海拔 Max Altitude	2000m	
预期寿命 Lifetime Expectancy	> 100 000 h ( $\theta$ hs=70°C, VR)	
过电压 overvoltage	1.1VR:有负荷时间的30% 30% of on-load-dur	
	1.15VR:30min/day	
	1.2VR:5min/day	
	1.3VR:1min/day	

## 产品代码说明 Part number system

■ 14 位产品代码说明如下:

The 14 digits part number is formed as follow:

1	2	3	4	5	6	7	8	9	10	11	12	13	14
□	□	□	□	□	□	□	□	□	□	□	□	□	□

### W S S

第 1~3 位: 型号代码

WSS

第 4~6 位: 标称容量

举例: 474 =  $47 \times 10^4$  PF = 0.47 $\mu$ F

105 =  $10 \times 10^5$  PF = 1.0 $\mu$ F

第 7~10 位: 额定电压

举例: 1200=1200V      1600=1600V

2000=2000V      3000=3000V

第 11 位: 容量偏差

J=±5%, K=±10%, M=±20%

第 12 位: 引出端代码

0 = 铜片      1 = 铜线

第 13~14 位: 内部特征码

Digit 1 to 3: Series code

WSS

Digit 4 to 6: Rated capacitance

For example: 474 =  $47 \times 10^4$  PF = 0.47 $\mu$ F

105 =  $10 \times 10^5$  PF = 1.0 $\mu$ F

Digit 7 to 10: rated voltage

1200=1200V      1600=1600V

2000=2000V      3000=3000V

Digit 11: Capacitance tolerance

J=±5%, K=±10%, M=±20%

Digit 12: Terminals code

0 = copper sheet      1 = copper wire

Digit 13 to 14: Internal use



## ■ 外形尺寸 Dimensions (mm)

Cn ( $\mu$ F)	W $\pm$ 1.0	H $\pm$ 1.0	T $\pm$ 1.0	dV/dt (V/ $\mu$ s)	$\hat{I}$ (A)	ESR max@ 100KHz(m $\Omega$ )	Ls max (nH)	Irms100kHz@ 70°C(A)	Part number
<b>850VDC</b>									
0.47	37	25	15	1200	564	5.0	23	15	WSS4740850-#**
0.68	37	30	16	1200	816	5.0	23	16	WSS6840850-#**
1.00	37	34	20	1200	1200	5.0	23	17	WSS1050850-#**
1.20	37	34	20	1200	1440	5.0	23	17.5	WSS1250850-#**
1.50	37	34	20	1200	1800	5.0	23	18	WSS1550850-#**
2.00	42	40	20	750	1500	4.5	29	19	WSS2050850-#**
2.20	42	40	20	750	1650	4.5	29	19.5	WSS2250850-#**
2.50	42	44	24	750	1875	4.5	29	20	WSS2550850-#**
3.00	42	44	24	750	2250	4.5	29	21	WSS3050850-#**
3.30	42	45	30	750	2475	4.5	29	21.5	WSS3350850-#**
4.00	57	45	30	450	1800	4.0	33	23	WSS4050850-#**
4.70	57	45	30	450	2115	4.0	33	24.5	WSS4750850-#**
5.00	57	45	30	450	2250	4.0	33	25	WSS5050850-#**
6.00	57	50	35	450	2700	4.0	33	26	WSS6050850-#**
6.50	57	50	35	450	2925	4.0	33	27	WSS6550850-#**
<b>1000VDC</b>									
0.47	37	25	15	1300	611	5.0	23	14	WSS4741000-#**
0.68	37	30	16	1300	884	5.0	23	15	WSS6841000-#**
0.82	37	30	16	1300	1066	5.0	23	16	WSS8241000-#**
1.00	37	34	20	1300	1300	4.5	23	17	WSS1051000-#**
1.20	42	40	20	850	1020	4.5	29	16	WSS1251000-#**
1.50	42	40	20	850	1275	4.5	29	16	WSS1551000-#**
2.00	42	44	24	850	1700	4.5	29	17	WSS2051000-#**
2.20	42	44	24	850	1870	4.0	29	20	WSS2251000-#**
2.50	42	45	30	850	2125	4.0	29	21	WSS2551000-#**
3.00	42	45	30	850	2550	4.0	29	21.5	WSS3051000-#**
3.30	42	43	42	850	2805	4.0	29	22	WSS3351000-#**
4.00	57	45	30	500	2000	4.0	33	21	WSS4051000-#**
4.70	57	50	35	500	2350	4.0	33	22	WSS4751000-#**
5.00	57	50	35	500	2500	4.0	33	23	WSS5051000-#**
<b>1200VDC</b>									
0.33	37	25	15	1500	495	4.5	23	15	WSS3341200-#**
0.47	37	30	16	1500	705	4.5	23	16	WSS4741200-#**
0.68	37	34	20	1500	1020	4.5	23	17	WSS6841200-#**
0.82	42	40	20	950	779	4.0	29	18	WSS8241200-#**
1.00	42	40	20	950	950	4.0	29	19	WSS1051200-#**
1.20	42	44	24	950	1140	4.0	29	19	WSS1251200-#**
1.50	42	44	24	950	1425	4.0	29	19.5	WSS1551200-#**
2.00	42	45	30	950	1900	4.0	29	20	WSS2051200-#**
2.20	42	43	42	950	2090	4.0	29	21	WSS2251200-#**
2.50	42	43	42	950	2375	4.0	29	22	WSS2551200-#**
3.00	57	45	30	600	1800	3.8	33	22	WSS3051200-#**
3.30	57	50	35	600	1980	3.8	33	23	WSS3351200-#**
4.00	57	50	35	600	2400	3.8	33	24	WSS4051200-#**

## ■ 外形尺寸 Dimensions (mm)

Cn ( $\mu$ F)	W $\pm$ 1.0	H $\pm$ 1.0	T $\pm$ 1.0	dV/dt (V/ $\mu$ s)	$\hat{I}$ (A)	ESR max@ 100KHz(m $\Omega$ )	Ls max (nH)	I <sub>rms</sub> 100kHz@ 70°C(A)	Part number
<b>1600VDC</b>									
0.22	37	25	15	1900	418	6.0	23	15	WSS2241600-#**
0.33	37	30	16	1900	627	6.0	23	15.5	WSS3341600-#**
0.39	37	34	20	1900	741	5.5	23	16	WSS3941600-#**
0.47	37	34	20	1900	893	5.5	23	17	WSS4741600-#**
0.68	42	40	20	1250	850	4.0	29	18	WSS6841600-#**
0.82	42	44	24	1250	1025	4.0	29	19	WSS8241600-#**
1.00	42	45	30	1250	1250	4.0	29	19.5	WSS1051600-#**
1.20	42	45	30	1250	1500	4.0	29	20	WSS1251600-#**
1.50	57	45	30	750	1125	3.5	33	22	WSS1551600-#**
2.00	57	50	35	750	1500	3.5	33	24	WSS2051600-#**
<b>1700VDC</b>									
0.15	37	25	15	2000	300	7.0	23	14	WSS1541700-#**
0.22	37	30	16	2000	440	6.0	23	15	WSS2241700-#**
0.33	37	34	20	2000	660	5.5	23	15.5	WSS3341700-#**
0.39	37	34	20	2000	780	5.5	23	16	WSS3941700-#**
0.47	42	36	24	1260	592	4.0	29	16	WSS4741700-#**
0.56	42	36	24	1260	706	4.0	29	17	WSS5641700-#**
0.68	42	44	24	1260	857	3.5	29	18	WSS6841700-#**
0.82	42	44	24	1260	1033	3.5	29	19	WSS8241700-#**
1.00	57	45	25	780	780	3.5	33	18	WSS1051700-#**
1.20	57	43.5	29.5	780	936	3.5	33	19	WSS1251700-#**
1.50	57	50	35	780	1170	3.0	33	22	WSS1551700-#**
2.00	57	50	35	780	1560	3.0	33	24	WSS2051700-#**
3.00	57	55	45	780	2340	3.0	33	28	WSS3051700-#**
<b>2000VDC</b>									
0.10	37	25	15	2241	224	8.0	23	14	WSS1042000-#**
0.15	37	25	15	2241	336	8.0	23	15	WSS1542000-#**
0.22	37	30	16	2241	493	6.0	23	15.5	WSS2242000-#**
0.33	37	34	20	2241	740	6.0	23	16	WSS3342000-#**
0.47	42	40	20	1300	611	4.0	29	17	WSS4742000-#**
0.56	42	44	24	1300	728	4.0	29	18	WSS5642000-#**
0.68	42	44	24	1300	884	3.5	29	18.5	WSS6842000-#**
0.82	42	45	30	1300	1066	3.5	29	19	WSS8242000-#**
1.00	57	45	30	850	850	4.0	33	24	WSS1052000-#**
1.20	57	45	30	850	1020	4.0	33	23	WSS1252000-#**
1.50	57	50	35	850	1275	4.0	33	24	WSS1552000-#**

## ■ 外形尺寸 Dimensions (mm)

Cn ( $\mu$ F)	W $\pm$ 1.0	H $\pm$ 1.0	T $\pm$ 1.0	dV/dt (V/ $\mu$ s)	$\hat{I}$ (A)	ESR max@ 100KHz(m $\Omega$ )	Ls max (nH)	Irms100kHz@ 70°C(A)	Part number
<b>2500VDC</b>									
0.068	37	25	15	3230	220	8.5	23	14	WSS6832500-#**
0.100	37	30	16	3230	323	8.5	23	15	WSS1042500-#**
0.150	37	34	20	3230	485	8.0	23	16	WSS1542500-#**
0.180	37	34	20	3230	581	7.5	23	17	WSS1842500-#**
0.220	42	40	20	2100	462	4.0	29	17	WSS2242500-#**
0.330	42	44	24	2100	693	4.0	29	17.5	WSS3342500-#**
0.470	42	45	30	2100	987	3.5	29	18	WSS4742500-#**
0.680	42	43	42	2100	1428	3.5	29	18.5	WSS6842500-#**
1.000	57	50	35	1200	1200	3.5	33	19.5	WSS1052500-#**
<b>3000VDC</b>									
0.047	37	25	15	3361	158	8.5	23	13	WSS4733000-#**
0.068	37	30	16	3361	229	8.0	23	14	WSS6833000-#**
0.100	37	34	20	3361	336	7.5	23	15	WSS1043000-#**
0.150	37	34	20	3361	504	7.0	23	15.5	WSS1543000-#**
0.220	42	40	20	2050	451	5.0	29	16	WSS2243000-#**
0.330	42	45	30	2050	677	4.5	29	16.5	WSS3343000-#**
0.470	42	43	42	2050	964	4.0	29	18	WSS4743000-#**
0.680	57	50	35	1200	816	4.0	33	19	WSS6843000-#**
0.820	57	50	35	1200	984	3.5	33	20	WSS8243000-#**
<b>5000VDC</b>									
0.047	57	45	30	3500	164	8.5	33	16	WSS4735000-#**
0.068	57	45	30	3500	238	8.0	33	16.5	WSS6835000-#**
0.100	57	45	30	3500	350	7.5	33	17	WSS1045000-#**
0.120	57	45	30	3500	420	7.5	33	17.5	WSS1245000-#**
0.150	57	45	30	3500	525	7.0	33	18	WSS1545000-#**
0.180	57	50	35	3000	540	7.0	33	20	WSS1845000-#**
0.200	57	50	35	3000	600	6.5	33	21	WSS2045000-#**
0.220	57	50	35	3000	660	6.5	33	22	WSS2245000-#**

- 备注: 1. "-" 表示容量偏差。"- " =capacitance tolerance code, M=±20%,K=±10%,J=±5%,  
2. "Irms"测试条件:环境温度 70°C, 频率 100KHz, "Irms" at 100KHz,+70°C  
3. "ESR". "Ls"均为典型值。"ESR". "Ls"are typical values